



This 3.3-acre facility will provide additional storage to attenuate peak flows downstream. This facility will also provide partial retrofit treatment to about 1,000 acres of tributary area, the majority of which is urban and developed. This RSF also provides some reduction in flooding of structures in the vicinity. The land delineated for this project is owned by the City. The proposed RSF occupies 3.3 acres, with a Permanent Pool Volume of 6.2 ac-ft and a Residence Time of 1.7 days. **Table 4.4.5** shows the conceptual cost estimates for this alternative.

Alternative OM2 - Park Avenue Culvert Improvement and RSF near Lakeland Avenue

The City identified an opportunity to receive construction funds from the Georgia Department of Transportation (GDOT) to improve the Park Avenue culvert at One Mile Branch. CDM performed a separate evaluation for this alternative that is described in detail in Appendix D.

This alternate included the upgrade of the existing culvert to a 7 ft H x 4 ft W double box culvert in conjunction with a RSF. The design drawings for this culvert upgrade at Park Avenue are available to the City. The stormwater facility consists of an offline detention basin located between Lakeland Avenue and Park Avenue as shown on **Figure 4.4.4**. The maximum size for the RSF that the open space available downstream of Lakeland Avenue allows is 1.2 acres. This alternative achieves a significant stage reduction both upstream and downstream of the facility. The stormwater drainage off the Lakeland Avenue on the west of One Mile Branch can be routed to the RSF and then discharged to the stream.

The proposed RSF occupies 1.2 acres, with a Permanent Pool Volume of 1.9 ac-ft and a Residence Time of 2 days. The tributary area to the facility is 107 acres. The implementation of this alternative will bring Lakeland Avenue in compliance with the level of service and also reduce some flooding in the neighboring structures.

The proposed RSF will treat 107 acres of untreated tributary area, and therefore will reduce sediment load to One Mile Branch. Based on field observations, and the regional data included in the National Wetland Inventory (NWI), it is anticipated that this facility will require wetland mitigation. The land on which this facility is proposed is also not owned by the City. **Table 4.4.6** shows the conceptual cost estimates for this alternative.